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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/716,195	11/17/2000	Virgil Wilkins	5127P001	6178	
24998 7	590 04/09/2004		ЕХАМГ	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L STREET NW			HUYNH, KIM NGOC		
	GTON, DC 20037-1526		ART UNIT	PAPER NUMBER	
	,		2182	15	
			DATE MAILED: 04/09/2004	1)	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.  09/716,195  WILKINS ET AL.	/°				
Office Action Summary Examiner Art Unit					
Kim Huynh 2182					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on <u>8/8/03</u> .					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
☑ Claim(s) <u>1-12,14-21,28-50 and 53-58</u> is/are pending in the application.					
4a) Of the above claim(s) 2-12,14,28-50 and 54-58 is/are withdrawn from consideration.					
Claim(s) is/are allowed.					
6) Claim(s) 1 and 53 is/are rejected.					
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d)					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. §§ 119 and 120					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1.☐ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application since a specific reference was included in the first contents of the specification as in an Application Data Sha	•				
since a specific reference was included in the first sentence of the specification or in an Application Data She 37 CFR 1.78.	ж.				
a) The translation of the foreign language provisional application has been received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78					
AMaaharan 44ah					
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)					
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) Other:					

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### **DETAILED ACTION**

## Election/Restrictions

1. Newly submitted claims 54-58 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the cache manager (claim 54 is drawn to the same withdrawn species of claims 15 and 28), and the managing of data in cache memory and mapping controller is of different scope.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 54-58 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asnaashari (US 6,076,137) in view of Ellis (US 6,029,226).

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Claim 1, Asnaashari discloses an integrated I/O controller integrated into a single IC device (col. 5, II. 24-26) having a host interface subsystem 14, a mapping controller 26 for mapping the logical block address (LBA) into the peripheral block addresses (PBA) of one or more peripheral devices 0-M (col. 2, II. 38-44 and col. 6, II. 1-13 and col. 7, II. 14-17) and a peripheral interface device 24 coupled to the peripheral devices and the peripheral interface device using the associated PBA (col. 2, II. 30-35). Asnaashari does not explicitly disclose the host interface having a command decode controller for parsing the host command to identify the types of command (data and non-data flow).

Ellis teaches a controller 360 having a host interface (SCSI interface 361) having a command descriptor block (CDB) receiver and decoder for decoding the CDB of the host commands (Fig. 5, step 500) since the contains the operation code indicating the type of operation to be perform (col. 2, II. 34-44 and col. 6, II. 34-40). It would have been obvious to one having ordinary skill in the art for one having ordinary skill in the art to implement the decoder for parsing the host command in the host interface as taught by Ellis since host commands inherently include data flow (data manipulating commands) and non-data flow (servo control, control signals, CRC, interrupt and status report) based on the operation code of the command descriptor (control bits, functional bits, addresses, operational code, Ellis. Col. 2, II. 34-44) and parsing a host command is an inherent function of any I/O controller in order to determine and carry out the operation required by the host command.

Claim 53, Asnaashari discloses the flow type host command include read and write command (storing and retrieving of data file, col. 2, II. 19-26 and col. 5, II. 53-56).

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### Response to Arguments

4. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment.

#### Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dobbek (Us 5,890,209) and Noble et al. (US 6,693,754) disclose various disk drive controller having LBA and PBA mapping controller.
- 6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703) 308-1678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kim Huynh

Primary Examiner

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KH 4/5/04